AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-37 (canceled).

38 (currently amended). A communication apparatus utilizing a Digital Subscriber Line (xDSL) modem that is selectively connected to a central communication apparatus to perform a full duplex communication, comprising:

a communicator that transmits a plurality of Mode Request (MR) signals to the central communication apparatus, said plurality of MR signals requesting that the central communication apparatus respond by transmitting a plurality of Mode Select (MS) signals to the communication apparatus, said plurality of [[MR]] MS signals designating a particular communication mode;

said communicator transmitting one of [[an]] acknowledge (ACK) ~~signal~~ signals and [[a]] negative acknowledge (NAK) ~~signal~~ signals to the central communication apparatus when said plurality of MS signals are received by the communication apparatus, wherein first frequencies utilized by said plurality of MR signals and second frequencies utilized by said plurality of MS signals belong to a mutually different band, said plurality of MR signals carrying identical data with an identical timing, but having different carrier frequencies.

39 (previously presented). The communication apparatus of claim 38, wherein said first frequencies are lower than said second frequencies.

40 (previously presented). The communication apparatus of claim 38, wherein said plurality of MR signals comprise three MR signals, and wherein said plurality of MS signals comprise three MS signals.

41 (previously presented). The communication apparatus of claim 40, wherein said first frequencies utilized by said three MR signals comprise 9 times a base carrier frequency, 17 times said base carrier frequency, and 25 times said base carrier frequency, wherein said base carrier frequency comprises one of 4.3125 kHz and 4.000 kHz.

42 (previously presented). The communication apparatus of claim 40, wherein said second frequencies utilized by said three MS signals comprise 40 times a base carrier frequency, 56 times said base carrier frequency, and 64 times said base carrier frequency, wherein said base carrier frequency comprises one of 4.3125 kHz and 4.000 kHz.

43 (currently amended). The communication apparatus of claim 38, wherein said communicator transmits said NAK ~~signal~~ signals in response to receiving a plurality of MS signals that require a non-executable mode.

44 (currently amended). The communication apparatus of claim 43, wherein said communicator returns the communication apparatus to an initialization state after said NAK ~~signal is~~ signals are transmitted.

45 (previously presented). The communication apparatus of claim 38, wherein each MR signal, of said plurality of MR signals, starts and ends with a High level Data Link Control (HDLC) flag, and includes an identification field and a frame check sequence (FCS) field.

46 (previously presented). The communication apparatus of claim 45, wherein said identification field includes revision information.

47 (previously presented). A central communication apparatus selectively connectable to a remote communication apparatus to perform a full duplex communication utilizing a Digital Subscriber Line (xDSL) modem, the central communication apparatus comprising:

a communicator that transmits a plurality of Mode Select (MS) signals to the remote communication apparatus to designate a particular communication mode in response to a receipt of a plurality of Mode Request (MR) signals from the remote communication apparatus, said plurality of MR signals requesting that the central communication apparatus transmit said plurality of MS signals;

wherein first frequencies utilized by said plurality of MR signals and second frequencies utilized by said plurality of MS signals belong to a mutually different band, said plurality of MS signals carrying identical data with an identical timing, but having different carrier frequencies.

48 (previously presented). The central communication apparatus of claim 47, wherein said first frequencies are lower than said second frequencies.

49 (previously presented). The central communication apparatus of claim 47, wherein said plurality of MS signals comprise three MS signals, and wherein said plurality of MR signals comprise three MR signals.

50 (previously presented). The central communication apparatus of claim 49, wherein said first frequencies comprise 9 times a base carrier frequency, 17 times

said base carrier frequency, and 25 times said base carrier frequency, wherein said base carrier frequency comprises one of 4.3125 kHz and 4.000 kHz.

51 (previously presented). The central communication apparatus of claim 49, wherein said second frequencies comprise 40 times a base carrier frequency, 56 times said base carrier frequency, and 64 times said base carrier frequency, wherein said base carrier frequency comprises one of 4.3125 kHz and 4.000 kHz.

52 (previously presented). The central communication apparatus of claim 47, wherein each MS signal, of said plurality of MS signals, includes an identification field that stores modulation independent information, and a standard information field that stores modulation dependent information, data in each field being hierarchically stored.

53 (previously presented). The central communication apparatus of claim 52, wherein each MS signal, of said plurality of MS signals, includes a plurality of octets, a highest bit of each of said plurality of octets delimiting data within said plurality of octets.

54 (previously presented). The central communication apparatus of claim 52, wherein said identification field includes revision information.

55 (previously presented). The central communication apparatus of claim 52, wherein said standard information field includes information designating ITU-T Recommendation G.992.1.

56 (previously presented). The central communication apparatus of claim 52, wherein said standard information field includes information designating ITU-T Recommendation G.992.2.

57 (currently amended). A method for performing a full duplex communication from a remote communication apparatus to a central communication apparatus utilizing a Digital Subscriber Line (xDSL) modem, comprising:

transmitting a plurality of Mode Request (MR) signals to the central communication apparatus that request that the central communication apparatus respond by transmitting a plurality of Mode Select (MS) signals designating a particular communication mode to the remote communication apparatus;

transmitting one of [[an]] acknowledge (ACK) ~~signal~~ signals and [[a]] negative acknowledge (NAK) ~~signal~~ signals to the central communication apparatus when the

plurality of MS signals are received by the remote communication apparatus, wherein first frequencies utilized by the plurality of MR signals and second frequencies utilized by the plurality of MS signals belong to a mutually different band, the plurality of MR signals carrying identical data with an identical timing, but having different carrier frequencies.

58 (previously presented). The method of claim 57, further comprising having the first frequencies be lower than the second frequencies.

59 (previously presented). The method of claim 57, wherein transmitting a plurality of MR signals comprise transmitting three MR signals, and wherein transmitting a plurality of MS signals comprise transmitting three MS signals.

60 (previously presented). The method of claim 59, wherein the first frequencies utilized by the three MR signals comprise 9 times a base carrier frequency, 17 times the base carrier frequency, and 25 times the base carrier frequency, wherein the base carrier frequency comprises one of 4.3125 kHz and 4.000 kHz.

61 (previously presented). The method of claim 59, wherein the second frequencies utilized by the three MS signals comprise 40 times a base carrier frequency, 56 times the base carrier frequency, and 64 times the base carrier frequency, wherein the base carrier frequency comprises one of 4.3125 kHz and 4.000 kHz.

62 (currently amended). The method of claim 59, further comprising transmitting the NAK [[signal]] signals when a plurality of MS signals that require a non-executable mode is received.

63 (currently amended). The method of claim 62, further comprising returning the remote communication apparatus to an initialization state after the NAK ~~signal is~~ signals are transmitted.

64 (previously presented). The method of claim 57, further comprising having each MR signal, of the plurality of MR signals, start and end with a High level Data Link Control (HDLC) flag, and including an identification field and a frame check sequence (FCS) field.

65 (previously presented). The method of claim 64, further comprising associating revision information in the identification field.

66 (previously presented). The method of claim 57, further comprising having each MS signal, of the plurality of MS signals, include a plurality of octets, a highest bit of each of the plurality of octets delimiting data within the plurality of octets.

67 (previously presented). The method of claim 57, further comprising having each MS signal, of the plurality of MS signals, include an identification field that stores modulation independent information, and a standard information field that stores modulation dependent information.

68 (previously presented). The method of claim 67, further comprising associating information designating ITU-T Recommendation G.992.1 with the standard information field.

69 (previously presented). The method of claim 67, further comprising associating information designating ITU-T Recommendation G.992.2 with the standard information field.

70 (previously presented). A method for performing a full duplex communication from a central communication apparatus to a remote communication apparatus utilizing a Digital Subscriber Line (xDSL) modem, comprising:

transmitting a plurality of Mode Select (MS) signals to the remote communication apparatus that designate a particular communication mode after a plurality of Mode Request (MR) signals from the remote communication apparatus, which request that the central communication apparatus transmit the plurality of MS signals, are received by the central communication apparatus;

wherein first frequencies utilized by the plurality of MR signals and second frequencies utilized by the plurality of MS signals belong to a mutually different band, the plurality of MS signals carrying identical data with an identical timing, but having different carrier frequencies.

71 (previously presented). The method of claim 70, further comprising having the first frequencies be lower than the second frequencies.

72 (previously presented). The method of claim 70, wherein transmitting a plurality of MR signals comprise transmitting three MR signals, and wherein transmitting a plurality of MS signals comprise transmitting three MS signals.

73 (previously presented). The method of claim 72, wherein the first frequencies utilized by the three MR signals comprise 9 times a base carrier frequency, 17 times the base carrier frequency, and 25 times the base carrier frequency, the base carrier frequency comprising one of 4.3125 kHz and 4.000 kHz.

74 (previously presented). The method of claim 72, wherein the second frequencies utilized by the three MS signals comprise 40 times a base carrier frequency, 56 times the base carrier frequency, and 64 times the base carrier frequency, the base carrier frequency comprising one of 4.3125 kHz and 4.000 kHz.

75 (previously presented). The method of claim 70, further comprising having each MR signal, of the plurality of MR signals, start and end with a High level Data Link Control (HDLC) flag, and including an identification field and a frame check sequence (FCS) field.

76 (previously presented). The method of claim 75, further comprising associating revision information in the identification field.

77 (previously presented). The method of claim 70, further comprising having each MS signal, of the plurality of MS signals, include a plurality of octets, a highest bit of each of the plurality of octets delimiting data within the plurality of octets.

78 (previously presented). The method of claim 70, further comprising having each MS signal, of the plurality of MS signals, include an identification field that stores modulation independent information, and a standard information field that stores modulation dependent information.

79 (previously presented). The method of claim 78, further comprising associating information designating ITU-T Recommendation G.992.1 with the standard information field.

80 (previously presented). The method of claim 78, further comprising associating information designating ITU-T Recommendation G.992.2 with the standard information field.